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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/753,359	12/29/2000	Tal Isaac Lavian	10360-082001/BA0448	9719

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EXAMINER
HU, JINSONG

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _07 July 2004_.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-8,12-23 and 27-38_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _1-8,12-23 and 27-38_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-8,12-23 and 27-38 are presented for examination. Claims 9-11 and 24-

26 have been canceled; claims 33-38 are newly added claims.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1-8, 12-13, 16-23, 27-28 and 31-38 are rejected under 35 U.S.C. 102(e)

as being anticipated by Abrol et al. (US 6,542,734).

4.   As per claims 1 and 33-34, Abrol teaches a method for communication over a

network protocol stack in a network, the method comprising:

creating a packet through an application [260, Fig. 3], the packet being a self-

contained independent entity of data including header information for routing the packet

to from a source to a destination, the header information being associated with a layer

in a multiple layer network protocol stack [col. 4, line 66 – col. 5, line 27; col. 5, line 61 –

col. 6, line 5];

selecting a layer in the multiple layer network protocol stack for communicating

with the application [col. 5, lines 1-9; col. 5, line 61 – col. 6, line 5];

establishing an inner layer socket for communication between the application and

the selected layer using an inner layer application programming interface (IL API),

wherein the communication between the application and the selected layer bypasses

other layers in the multiple layer network protocol stack [col. 5, lines 1- 9; col. 5, line 61-

col. 6, line 5]; and

transmitting the packet including the header information from the application to

the selected layer through the inner layer socket [col. 7, lines 20-35; col. 8, lines 17-31].

5.   As per claim 2, Abrol teaches the header information associated with a transport

layer and the inner layer socket is a transport socket [col. 5, lines 18-27 & 61-65].

6.   As per claim 3, Abrol teaches the multiple layer network protocol stack is

compatible with TCP/IP and the transport socket is compatible with a TCP or UDP

transport layer protocol [202, Fig. 3; col. 5, lines 21-23 & 61-65].

7.   As per claim 4, Abrol teaches the header information includes header information

associated with a network layer and the inner layer socket is a network socket [col. 5,

lines 61-65; col. 6, lines 18-25 & 39-43].

8.   As per claim 5, Abrol teaches the multiple layer network protocol stack is

compatible with TCP/IP and the network socket is compatible with an IP network layer

protocol [204, Fig. 3; col. 5, lines 18-27].

9.   As per claim 6, Abrol teaches the header information includes header information

associated with a link layer and the inner layer socket is a link socket [col. 5, lines 61-

65].

10.   As per claim 7, Abrol teaches the multiple layer network protocol stack is

compatible with TCP/IP and the link socket is compatible with a link layer protocol [206,

Fig. 3; col. 5, lines 61-65].

11.   As per claim 8, Abrol teaches the step of selecting a layer in the multiple layer

network protocol stack further includes selecting the layer in the multiple layer network

protocol stack based on a type of the packet created by the application [col. 5, lines 18-

27].

12.   As per claims 12 and 13, Abrol teaches IL API provides a transport socket to

access transport layer information in the multiple layer network protocol stack, a

network socket to access network layer information in the multiple layer network

protocol stack, a link socket to access link layer information in the multiple layer network

protocol stack, and a physical socket to access physical port information in the multiple

layer network protocol stack [col. 5, lines 49-60].

13.   As per claims 16-23, 27-28 and 35-36, since they are apparatus claims of claims

1-8, they are rejected for the same basis as claims 1-8 above.

14.   As per claims 31- 32 and 37-38, since they are structure and computer claims of

claim 1, they are rejected for the same basis as claim 1 above.

Claim Rejections - 35 USC § 103

15.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

16.   Claims 14-15 and 29-30 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Abrol et al. (US 6,542,734) as applied to 1-8, 12-13, 16-23, 27-28,

and 31-38 above in view of Gigliotti et al. (US 6,138,143).

17.   As per claims 14 and 15, Abrol teaches the invention substantially as claimed in

claim 1. Abrol does not specifically teach using objected-oriented instructions in java

program language and running on a virtual machine. However, Gigliotti on the other

hand teaches the step of using objected-oriented instructions in java program language and running on a virtual machine [col. 5, lines 3-8]. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Abrol and Gigliotti because JAVA is a well-known objected-oriented language in the art for being used on a virtual machine (JAVA virtual machine) which on a level above the operating system. One of ordinary skill in the art would have been motivated to modify Abrol's system with Gigliotti's JAVA script based on specific design reason.

18.   As per claims 29 and 30, since they are apparatus claims of claims 14-15, they are rejected for the same basis as claims 14-15 above.

Conclusion

19.   Applicant's arguments with respect to claims 1-8,12-23 and 27-38 have been but they are not deemed to be persuasive.

20.·   In the remarks, applicant argued in substance that Abrol does not discloses transmitting a packet, including header information for routing the packet from a source to a destination, through an inner layer socket.

21.   Examiner respectfully traverses applicant's remarks:

Applicant fails to consider the teaching of the Abrol's reference for passing the

received IP packets to transport layer based on the information in the IP packets

header, wherein indicates the destination port number [col. 5, lines 18-27]. Furthermore,

Abrol discloses the step of handling those IP packets lack destination information, but

Abrol also points out this only happened in certain situations. It is not right to conclude

that all of those received packets in Abrol's system do not include header information.

Thus, Abrol is a relevant prior art reference.

22.   Accordingly, THIS ACTION IS MADE FINAL. See MPEP §706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

23.   A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

24.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jinsong Hu whose telephone number is (571) 272-3965.

The examiner can normally be reached on 8:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John A. Follansbee can be reached on (571) 272-3964. The fax phone

number for the organization where this application or proceeding is assigned is 703-

872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Jinsong Hu

January 19, 2005

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY